

New Cactus Bugs of the Genus *Chelinidea* (Hemiptera)

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THE cactus bugs of the genus *Chelinidea* form one of the important groups of insects which are being introduced in the effort to control prickly-pear in Australia by biological agencies. During the past two years the writer has collected these insects extensively in North America with the result that two undescribed species and a new variety have been discovered. The new forms have been referred to in our work under the writer's manuscript names, but, in view of their economic status, it is highly desirable that their descriptions should be published.

Chelinidea hunteri n. sp.

Head subequal in length to pronotum, ocelli nearer to eyes than to pronotal collar, juga rather abruptly pointed and a very little exceeded by the tylus. Pronotum more convexed than in *C. vittigera*, lateral margins nearly straight from humeral angles to collar, anterior margin without teeth. Connexivum little dilated, extending only as a narrow edge beyond the hemelytra; hemelytra and connexivum forming straight parallel lines. Under surface of fore femora with from three to six teeth distally, arranged in two rows. Tibiæ merely carinate.

Ground colour faded yellow; head dark brownish or fuliginous with a paler indistinct vitta extending from over the tylus to base of the head, antennæ fuliginous except distal joint; pronotum with fuliginous transverse vittæ near front and rear margins; coriaceous portion of hemelytra mottled with rusty brown and smoky areas, the veins pale and bordered by thin lines of black; membrane blackish bronze; beneath, uniform greenish yellow, with legs a shade darker, and tip of rostrum piceous.

Length 9.5 to 10.5 mm ; humeral breadth 3.5 to 4 mm.

Described from four male specimens collected by the writer on August 7th, 1922, at Ranchito, near Hermosillo, Sonora, Mexico, feeding on a cylindropuntia of the *Imbricatæ* series. Hunter *et al.* refers (Bur. Ent. Bull. 113, p. 20) to a small form found upon *O. arbuscula*, *O. versicolor*, and *O. fulgida* at Tuscon, Arizona (U.S.A.). There is little doubt that the above-described species is the same referred to by Hunter. The type material is in the writer's collection.

***Chelinidea canyona* n. sp.**

Head and pronotum subequal in length ; ocelli nearer to extremities of pronotal teeth than to eyes, juga rather abruptly pointed and just attaining the tip of the tylus or very slightly exceeded by it. Pronotum appearing slightly concave ; the lateral margins elevated, forming distinct, laterally compressed crests which are curved upward ; anterior margin with a strong acutely pointed tooth on either side. Connexivum greatly dilated and inclined upward. Under surface of fore femora bearing distally two or three small teeth. Tibiæ triangular with all edges prominently elevated ; hind tibiæ with the two outer edges almost foliaceous. Penultimate ventral segment of female medianly cleft to two-thirds of its width, the edges of the incision slightly rounded and barely overlapping ; margins either side of notch very slightly concave.

Colour above rusty brown with darker markings. Head brown with a paler vitta on tylus extending to base of the head and bordered by shining black ; pronotum with a wide border of black just before the posterior margin, and very narrow ones along the lateral margins ; hemelytra with three dark bluish vittæ each, one along the outer margin and two oblique ones converging with the first proximally ; membrane black ; connexivum dark with segments indicated by pale lines ; beneath yellowish except pectus, bases of legs, and tip of rostrum, shining black ; legs brownish yellow except coxæ and bases of femora.

Length 11 to 14 mm. ; humeral breadth 4 to 4.5 mm.

Holotype, allotype, and paratypes are in the collection of the writer.

The writer first collected this species in the Rio Frio canyon, near Rio Frio, Texas (U.S.A.), in June 1921. Subse-

quently, it was taken generally over the canyon country north of Uvalde, Texas, but its distribution is apparently limited to the canyons. Its food is the prickly-pears of such regions. Since the above date I have constantly referred to it in my reports and correspondence under the manuscript name of *Chelinidea canyona*.

***Chelinidea vittigera* Uhler, var. *texana*, n. var.**

This variety differs from the typical *C. vittigera* Uhler mainly in that the representatives are slightly less robust and that they lack the colour markings of the described form. The colour is uniformly testaceous, with membranous portion of hemelytra and tip of beak smoky black.

Length 10 to 13 mm. ; humeral breadth 3 to 4.5 mm.

It is this form of *Chelinidea* which is the common cactus bug of Texas. In that State I have taken it at Kingsville, Brownsville, Laredo, San Antonio, Uvalde, La Pryor, Con Can, and Eagle Pass. In Mexico I have taken it in the country just south of Piedras Negras (Coahuila) and at Monterey (Nuevo Leon).

Besides the various *Opuntias* of the regions mentioned, I have occasionally found it feeding upon *Echinocereus* sp. ("pitallo") and *Opuntia leptocaulis* ("tasajillo").
